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Determinants of vaccination coverage in Poland at the poviát level

Streszczenie w języku angielskim

The history of practices similar to modern vaccinations in Europe began in the 18th century, although infectious diseases have always accompanied humanity. The role of vaccinations became established in the 20th century, as evidenced by the eradication of smallpox in 1980. Since then, vaccinations have been recognized as one of the most effective public health interventions, contributing to a significant reduction in mortality globally. Unfortunately, the COVID-19 pandemic has deepened inequalities in access to vaccinations. International institutions are currently warning of growing threats to the effectiveness of vaccination programs, stemming from factors such as the spread of disinformation, humanitarian crises, and limited financial support. The aim of this dissertation was to examine the vaccination coverage of the child population and its dynamics in Poland at the poviát level between 2014 and 2018, to analyze the relationship between social and economic factors and vaccination coverage at the poviát level, to acquire knowledge on the social and economic determinants of vaccination coverage, and to analyze attitudes toward vaccination among selected social groups. The research included a review of the literature on the determinants of vaccination coverage in high-income countries, analyzed data on vaccination coverage at the poviát and voivodeship levels, presented differences measured at different granularity levels, and identified clusters with sufficient and insufficient vaccination coverage to achieve herd immunity. Data on vaccination coverage at the poviát level was also analyzed and the relationship between socioeconomic factors and vaccination coverage was assessed. The research was supplemented by an analysis of attitudes toward vaccination among healthcare workers, medical students, and nursing students.

The results demonstrate the importance of data reporting for identifying immunization gaps and the information that can be gained by examining the relationships between vaccination data and data on social and economic factors. Improving the vaccination status of the population

requires a multifaceted approach, starting from eliminating barriers to vaccinations, through effective communication with patients, to correct reporting of data on vaccination uptake at all reporting levels and their analysis to facilitate the planning of targeted interventions.